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Reviewed for Addressee  
Corres. Control RFP

10/19/95 *[Signature]*  
DATE BY

Ref Ltr. #

DOE ORDER # 5400.1

## States Government

# Memorandum

OCT 16 1995

AMEP:KM:14172

Department of Energy Environmental Restoration Division Comments on the Phase I Interim Measure/Interim Remedial Action Decision Document for Operable Unit 7 - Present Landfill

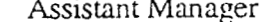
Robert Card, Vice President  
Environmental Restoration/Waste Management & Integration  
Kaiser-Hill Company, L.L.C.

Attached are the Department of Energy (DOE) Environmental Restoration Division comments on the Operable Unit (OU) 7 Interim Measure/Interim Remedial Action (IM/IRA) decision document.

Please note that the comments address several issues with the IM/TRA. Of greatest concern are the questions regarding funding and construction of the OU 7 slurry wall and wetland mitigation. DOE cannot concur on the final IM/TRA decision document until these issues are resolved.

These comments are provided for your consideration, and are not intended to impact the cost, schedule, or scope of the contract. If you believe there will be such an impact, you should immediately notify the COR and the Contracting Officer and not implement any action arising from these comments.

If you have any questions or comments, please call Kurt Muenchow at extension 2184.

  
Jessie Roberson,  
Assistant Manager  
for Environmental Programs

Attachment

**ADMIN RECORD**

A-DU07-000499

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**RF REVIEW COMMENT RECORD**

2. Document Reviewed: (Title, Number, Revision and Date) Phase I IM/IRA Decision Document for Operable Unit 7 - Present Landfill. Draft Report. July 27, 1995		3. Reviewer: <u>MURT MURKHA</u> Signature and Date: <u>10/2/95</u>		Page 1 of 6	
		4. Agreement with dispositions: Date _____ Reviewer _____ Organization: DOE-ER-RFO Location and Phone No. T117A x2184		Document Preparer _____	
5. Comment No.	6. Comment Type	7. Comments (include suggested changes)			
1	Suggest.	<p>Executive Summary: page i - Last sentence, third paragraph: This sentence is quite confusing as it is worded in a double-negative. I do not understand the sentence, and suggest that it be rewritten. Further, the Executive Summary should not use the term-of-art, "acceptable risk", since this risk assessment jargon is not well understood by the public. They may not see added risk as "acceptable", nor understand the concept of EPA-defined "acceptable risk range(s)". I suggest the use of layman terminology in the Executive Summary.</p> <p>Page 1-4, Section 1.3; P.1-5, S.1.3.2; P.2-2; P.3-23, S.3.4.3.3; P.3-26, S.3.5.1.1; P.3-27, S.3.5.1.6; P.4-3, S.4.2.4; P.4-4, S.4.2.6; P.5-3, S.5.1.3; P.7-2, S.7.1; P.7-8, S.7.2.2.3; P.7-12, S.7.3.3; P.7-13, S.7.3.6; and P.7-15, S.7.5:</p> <p>General - It is clear that construction/repair of the slurry wall is an integral part of successfully isolating the landfill from the surrounding environment. Without construction/maintenance of the slurry wall, the proposed remedy is incomplete. The reason that the slurry wall was proposed as a separate maintenance action was so that it could be funded/completed quickly, and prior to construction of the proposed cap. Can the slurry wall physically be repaired AFTER the proposed cap is in place, or is the existing slurry wall under the footprint of the cap? The slurry wall repair/construction must be funded prior to approval of the IM/IRA decision document.</p> <p>Specific - Under "Slurry Wall Maintenance", the IM/IRA DD asserts that, "Construction of the slurry wall will occur in late 1995." Either the slurry wall activity must be funded for FY 96, or KH/DOE should NOT be committing to construction.</p> <p>On page 2-2, in the leachate discussion, the document asserts that, "(t)he volume [of leachate] is expected to decrease after ... the slurry wall [is] in place." Either funding for the slurry wall must be found for FY 96, or this statement must be modified.</p> <p>On page 2-23, the IM/IRA states that, "(a) slurry wall will be constructed as a</p>			
2	Non-C	<p>8. Disposition</p>			

Comment Type:  
E—Essential comment

(agreement must be documented for other than verbatim incorporation) S—Suggested comment NON-C—Nonconcurrence, based upon the following comment

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		<p>On page 3-23, construction of the slurry wall, and attendant reduction of groundwater inflow, leachate generation, and seep outflow are cited as support for delisting the seep water. If the slurry wall is not constructed, how does this affect this delisting argument?</p> <p>In section 3.5.1.1, the slurry wall installation is cited as a piece of minimizing exposure to seep water/leachate. What is the impact on potential exposure if the slurry wall is not constructed?</p> <p>Page 3-27 &amp; 3-28, Section 3.5.1.6 cites construction of the slurry wall as contributing to reducing groundwater in flow and subsequent leachate generation by 94%. If the slurry wall is not built due to a lack of funding, what is the effect on the control/containment of the groundwater plume? Without the slurry wall, won't a new seep form in the proposed cap? Without a slurry wall, how will the groundwater plume be contained? What affect does continued groundwater inflow have on contaminant transport? The argument in this section fails without construction of the slurry wall. Either the slurry wall construction must be funded, or this argument must be completely re-analyzed and re-written to take into account the continued groundwater flow loading and subsequent plume migration and contaminant transport.</p> <p>Section 4.2.4, "Containment", asserts that because, "...the groundwater in the source area is presently contained laterally by the ... slurry wall..." that, "(c)ontainment of the groundwater will not be addressed further in this report." This statement is unacceptable unless the slurry wall is funded and constructed. If the slurry wall activity is not funded, this entire section needs to be re-analyzed and re-written to describe containment of contaminated groundwater.</p> <p>Similarly, section 4.2.5 uses reference to the unfunded slurry wall as justification for limiting "offsite migration of [landfill] gas". How will lateral gas migration</p>	

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		<p>be controlled without the slurry wall? A full analysis and discussion of landfill gas collection/control/measurement is required if the slurry wall is not constructed.</p> <p>On page 5-3, a slope angle of 20 degrees is partially justified by exitance of an effective slurry wall which, "...limit(s) groundwater inflow...". How will this slope angle be justified if groundwater loadings are not reduced? Will the slope angle require modification? If so, what is the added cost? Does this cost exceed the cost of constructing the slurry wall? Would cap slumping and seepage occur on a groundwater-lubricated 20 degree slope?</p> <p>The document suggests that 93% of groundwater inflow would be eliminated with construction of the proposed slurry wall. How will this groundwater inflow and subsequent containment of the waste mass be effected without the slurry wall action?</p> <p>Groundwater modelling showed that 60% of leachate is from groundwater inflow. The cap proposed in the IM/TRA addresses the 40% of leachate generated via infiltration. A majority of the leachate generation, therefore is not addressed in the IM/TRA, as the proposed slurry wall remains unfunded. Therefore, the proposed containment remedy presented in the IM/TRA is incomplete without construction of the slurry wall, and is not acceptable. DOE/KH must either fund and build the slurry wall, or describe in the IM/TRA alternatives how groundwater infiltration and subsequent contaminant migration will be addressed by the remedy.</p> <p>If the slurry wall is not constructed, will water levels in the landfill waste mass be expected to decrease as asserted on page 7-12 &amp; 13?</p> <p>Section 7.3.6 states that recharge to the east landfill pond is greatly reduced as a</p>				
		8. Disposition				

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3	E	<p>Justification for the recommended alternative is based on 60% of the groundwater inflow being stopped by the slurry wall. Therefore, without the slurry wall, less than half of the leachate generation in the landfill is addressed by the proposed alternative. Groundwater and subsequent contamination migration is not addressed without the slurry wall. Therefore, this decision document is unacceptable and incomplete without funding and construction/maintenance of the slurry wall in FY 96. Until this issue is resolved, DOE will not issue this document to either the regulators or the public for consideration.</p> <p>Page 3-19, Section 3.4.2.1: Wetlands Requirements DOE Legal (OCC) is reviewing the ARARs described in the document. Specifically, the implication that the landfill pond and/or associated wetlands are "waters of the US" pursuant to the CWA, is being reviewed by DOE counsel. DOE OCC comments will be forwarded when they are received, and may require re-wording of this section.</p> <p>The document repeatedly refers to "wetland mitigation" being performed at Stanley Lake Protection Project (SLPP) as required. The document also hints that some "wetland mitigation bank" associated with SLPP will be used to mitigate wetland destruction. If this project is dependant upon both the SLPP and the mitigation bank projects, then each should be described in summary, including a status of each project. Specific sites for mitigation, wetland types destroyed vs. mitigated, etc... should be addressed in this document. Further, schedule for mitigation should be put forward. Finally, status of the "wetland bank", including regulatory approval and schedule for implementation should be described as it affects the OU 7 IM/IRA cap construction proposal. Like the slurry wall, this document gives the reader the impression that the wetland mitigation has been accomplished, or is guaranteed to occur. As with the currently un-funded slurry wall, wetland mitigation is far from a "done deal".</p>	
	Non-C	8. Disposition	

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<b>RF REVIEW COMMENT RECORD</b>			Page <u>5</u> of <u>6</u>
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5. Comment No.	6. Comment Type	<p>7. Comments (include suggested changes)</p>	8. Disposition
	<p>The "wetland bank" has not been established and approved by the regulators. Wetlands at SLPP have not been constructed for "deposit" into the "bank" (are they even funded for construction?). These issues should be fully expounded upon and addressed in this document. Page 5-2 indicates that, "(p)lanting of wetland vegetation for the SLPP is scheduled for summer 1995." Did this happen? If not, when is it scheduled? Is this activity still funded? Are the plantings the right type (classification) of wetland for mitigation at OU 7? The document states that the mitigation bank is "in development". What is the status? What are the impacts of regulators not approving the proposed bank in a timely manner?</p> <p>Anticipated acreage and Cowardin Class of wetlands requiring mitigation should be described, as well as acreage, Cowardin Class, and location of replacement acreage.</p> <p>Page 7-6 indicates that a 3:1 ratio for wetlands mitigation will be used, resulting in 3.6 acres of wetland being mitigated for OU 7 activities. Section 8.1.7, however, describes, "(a)proximately 1.1 acres or wetlands are (to be) mitigated." 1.1 acres at a 3:1 ratio works out to 3.3 acres of mitigation, not 3.6 acres. Which is correct?</p>	<p>The document repeatedly refers to mitigation of Preble's Meadow Jumping Mouse (PMJM), and indicates that DOE will mitigate losses to habitat, "as needed". What determines this need? Is there a regulatory trigger of some kind? Either we plan to mitigate habitat, or we don't. If we wait for a listing decision, we either end up with not having to mitigate, or having to do a formal consultation with the USFWS pursuant to Section 7 of the Endangered Species Act. Please describe in the document how and when a decision to mitigate habitat will be made. Also, please describe what DOE plans to do as "habitat mitigation".</p>	
4	E		

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5.	E	Page 8-4, Section 8.1.6 states that, " (t)wenty-six of the monitoring wells at OU 7 that fall under the footprint of the landfill cap have been abandoned as a separate maintenance action." DOE/KH proposed to accelerate closure of wells located under the proposed cap footprint early in FY 1995. Have these wells, in fact, been abandoned? Are they the same wells that were a part of the early-closure proposal DOE issued to the regulators last year? Were these wells actually abandoned, or was the work planned, then set aside due to funding considerations?	
6.	E	Page 9-17 asserts that there are, "... no commercially exploitable mineral resources at Rocky Flats." Western Aggregates, Inc. currently proposes to mine areas on the Rocky Flats Reservation.	

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